

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 5 and 9 as follows (a complete claim listing is provided below pursuant to 37 CFR 1.121), and add new claims 12 to 17, noting that claims 2 to 4, 6 to 8 and 10 and 11 are canceled:

1. (Currently Amended) A head system for performing azimuth recording on a recording medium by use of a plurality of recording heads, wherein:
said head system comprises a first recording head A including a plurality of first magnetic gaps A₁, A₂ having a first azimuth angle, and a second recording head B including a plurality of second magnetic gaps B₁, B₂ having a second azimuth angle different from said first azimuth angle; and

a positional relationship between said first and second magnetic gaps is so determined that in relation to each magnetization pattern formed on said recording medium by said first magnetic gaps of said first recording head, side edge portions in the formation direction of said patterns are overwritten by said second magnetic gaps of said second recording head, wherein the height of the lower edge portion of the gap A₁ is about the same as the height of a central portion of the gap B₂ and the height of a lower edge portion of the gap A₂ is about the same as the height of a central portion of the gap B₁, and wherein

said first and second recording heads are thin-film heads, and a single head chip constituting each said recording head is provided with a plurality of magnetic gaps and wherein

said first and second recording heads are mounted on a rotary drum, and each of said magnetization patterns formed on said recording medium is an inclined track, wherein said overwriting is conducted with such a positional relationship that a side edge portion of said magnetization pattern in the formation direction of said magnetization pattern formed by each said first magnetic gap of said first recording head coincides substantially with the center of each magnetization pattern formed by said second recording head.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) A recording and reproduction system for performing azimuth recording on a tape form recording medium by a plurality of recording heads, said system comprising a head system having a plurality of said recording heads, and a tape feeding means for feeding said tape form recording medium, wherein

 said head system comprises a first recording head A including a plurality of magnetic gaps A₁, A₂ having a first azimuth angle, and a second recording head B including a plurality of magnetic gaps B₁, B₂ having a second azimuth angle different from said first azimuth angle, and a positional relationship between said magnetic gaps is so determined that in relation to each magnetization pattern formed on said tape form recording medium by said magnetic gaps of said first recording head, side edge portions in the formation direction of said patterns are

overwritten by said magnetic gaps of said second recording head, wherein the height of the lower edge portion of the gap A1 is about the same as the height of a central portion of the gap B2 and the height of a lower edge portion of the gap A2 is about the same as the height of a central portion of the gap B1, and, wherein

 said first and second recording heads are thin-film heads, and a single head chip constituting each said recording head is provided with a plurality of magnetic gaps and wherein said first and second recording heads are mounted on a rotary drum, and each of said magnetization patterns formed on said recording medium is an inclined track, wherein said overwriting is conducted with such a positional relationship that a side edge portion of said magnetization pattern in the formation direction of said magnetization pattern formed by each said magnetic gap of said first recording head coincides substantially with the center of each magnetization pattern formed by said second recording head.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) A magnetic recording method for performing azimuth recording on a recording medium by use of a plurality of recording heads, comprising the steps of:

forming first magnetization patterns on said recording medium by a first recording head A comprising a plurality of magnetic gaps A1, A2 having a first azimuth angle; and forming second magnetization patterns on said recording medium by overwriting side edge portions in the formation direction of said first magnetization patterns by a second recording head B comprising a plurality of magnetic gaps B1, B2 having a second azimuth angle different from said first azimuth angle, wherein said first and second recording heads are mounted on a rotary drum, and each of said magnetization patterns formed on said recording medium is an inclined track, and

said overwriting is conducted with such a positional relationship that a side edge portion in the formation direction of said first magnetization pattern coincides substantially with the center in the width direction of said second magnetization pattern, and wherein the height of the lower edge portion of the gap A1 is about the same as the height of a central portion of the gap B2 and the height of a lower edge portion of the gap A2 is about the same as the height of a central portion of the gap B1.

10. (Canceled)

11. (Cancelled)

Please add the following new claims 12 to 17:

12. (New) The head system as set forth in claim 1, wherein, as for the height relationship

between the gaps A1 and A2, the upper edge of A1 is at the same height as the lower edge of A2, so that when the upper edge of A1 is at the same height as the lower edge of A2 side edges of magnetization patters formed on the tape by the magnetic gaps coincide with each other at the boundary therebetween.

13. (New) The head system as set forth in claim 1, wherein, as for the height relationship between the gaps A1 and A2, a slight clearance is provided between the upper edge of A1 and the lower edge of A2, or the upper edge of A1 and the lower edge of A2 overlap on each other, so that when there is a slight clearance between the upper edge of A1 and the lower edge of A2, the magnetization patterns formed on the tape by the magnetic gaps overlap on each other.

14. (New) The recording and reproduction system as set forth in claim 5, wherein, as for the height relationship between the gaps A1 and A2, the upper edge of A1 is at the same height as the lower edge of A2, so that when the upper edge of A1 is at the same height as the lower edge of A2 side edges of magnetization patters formed on the tape by the magnetic gaps coincide with each other at the boundary therebetween.

15. (New) The recording and reproduction system as set forth in claim 5, wherein, as for the height relationship between the gaps A1 and A2, a slight clearance is provided between the upper edge of A1 and the lower edge of A2, or the upper edge of A1 and the lower edge of A2

overlap on each other, so that when there is a slight clearance between the upper edge of A1 and the lower edge of A2, the magnetization patterns formed on the tape by the magnetic gaps overlap on each other.

16. (New) The recording method as set forth in claim 9, wherein, as for the height relationship between the gaps A1 and A2, the upper edge of A1 is at the same height as the lower edge of A2, so that when the upper edge of A1 is at the same height as the lower edge of A2 side edges of magnetization patters formed on the tape by the magnetic gaps coincide with each other at the boundary therebetween.

17. (New) The recording method as set forth in claim 9, wherein, as for the height relationship between the gaps A1 and A2, a slight clearance is provided between the upper edge of A1 and the lower edge of A2, or the upper edge of A1 and the lower edge of A2 overlap on each other, so that when there is a slight clearance between the upper edge of A1 and the lower edge of A2, the magnetization patterns formed on the tape by the magnetic gaps overlap on each other.